CLAIMS

1.   A pressure regulator and gaseous fuel internal combustion engine, comprising:

(a)   an internal combustion engine including a fuel line source having an outlet in communication with the engine, the fuel line including a controllable valve for regulating gaseous fuel pressure at the outlet;

(b)   a variable venturi or fixed venturi carburetor in communication with the fuel line outlet and the engine;

(c)   a first sensor providing a first signal corresponding to gaseous fuel pressure at the outlet;

(d)   a controller responsive to the first signal for controlling the valve and regulating gaseous fuel pressure to a desired pressure; and

(e)   wherein the controllable valve is a rotary actuated butterfly valve.

2.   The engine of claim 1, wherein the desired pressure is set by a user.

3.   A pressure regulator and gaseous fuel internal combustion engine, comprising:

(a)   an internal combustion engine including a fuel source and line having an outlet in communication with the engine, the fuel line including a controllable valve for regulating gaseous fuel pressure at the outlet;

(b)   a variable venturi or fixed venturi carburetor in communication with the fuel line outlet and the engine;

(c)   a first sensor providing a first signal corresponding to gaseous fuel pressure at the outlet;

(d)   at least one additional sensor for measuring at least one of the following conditions: Manifold Absolute Pressure, engine speed, Manifold Air Temperature, Engine Coolant Temperature, EGO, UEGO, Barometric Pressure, Engine Mass Air Flow, Throttle Position, and Throttle Inlet Pressure;

(e)   a calculator for calculating a desired gaseous fuel pressure at the outlet based on the input from the additional sensor in "d" and providing a second signal corresponding to the desired gaseous fuel pressure;

(f)   a controller responsive to the second signal moving the controllable valve;

-11-

and

(g)   wherein the controllable valve is a rotary actuated butterfly valve that is responsive to the controller to adjust the gaseous fuel pressure at the outlet and obtain the desired gaseous fuel pressure.